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EXAMINER

LOVE, TREVOR M

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Acknowledgement is made to Applicant's response filed 03/01/2010.

Claims 1, 4-12, 20, 21, and 26-30 are pending.

Claims 11, 12, 20, 21, and 26-30 are withdrawn from consideration.

Claims 1, 4, and 6-8 are currently amended.

Claims 1 and 4-10 are currently under consideration.

Withdrawn Rejections and/or Objections

The objection of claims 13, 16, 18, 19 and 22 as depending from a withdrawn base claim is withdrawn in view of Applicant's cancellation of said claims.

The rejection of claims 1 and 22 under 35 U.S.C. 102(b) as being anticipated by Oshimura et al. (EP 0826766, published March 4, 1998) is withdrawn in view of Applicant's cancellation of claim 22 and Applicant's amendments to claim 1.

The rejection of claims 2, 3, 13-19 and 22-25 under 35 U.S.C. 103(a) as being unpatentable over Oshimura et al. (EP 0826766, published March 4, 1998) is withdrawn in view of Applicant's cancellation of said claims.

New Grounds of Rejection – Necessitated by Amendment

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, and 4-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, claim 1 newly recites that component “(B) N-acyl-diaspartic acid or a salt thereof, represented by formula (2): [...] and represented by formula (3): [...], and the weight ratio of N-acyl-diaspartic acid or a salt thereof represented by formula (2) to N-acyl-diaspartic acid or a salt thereof represented by formula (3) is 1:3 to 3:1”. The way the claim is presented implies that component (B) is a singular component, yet requires two different components as said component. Claim 1 as currently written differs from claims 2 and 3 which were previously pending in that claim 2 was being interpreted as adding an additional component, which was proper in view of comprising language. However, in view of the current claim language, it is unclear how a single N-acyl-diaspartic acid or a salt thereof can be represented by two formulae.

For the sake of compact prosecution, the claim will be interpreted as component (B) requiring two separate components, of two separate formulae, namely (2) and (3).

Claims 4-10 are rejected for depending from indefinite claim 1.

Maintained Rejections

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, and 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshimura et al. (EP 0826766, published March 4, 1998).

Oshimura teaches a wash composition comprising a N-long-chain-acyl dipeptide or salt and a N-long-chain-acyl acidic amino acid exhibiting properties such as low irritation to skin, high resistance to water and an excellent feeling upon use (abstract). More specifically, Oshimura teaches that the dipeptide used can be N-(N'-long-chain-acyl-alpha-aspartyl) aspartic acid (page 3, lines 49-54) and that the N-long-chain-acyl

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acidic amino acid can be derived from aspartic acid and can have an acyl group having from 8-22 carbons (page 3, lines 54-56). Oshimura further teaches that the wash composition may contain other surface active agents including higher fatty acids or salts thereof as component (C) of the invention (page 4, lines 38-42). The invention is further exemplified through Formulation Example 2 (page 13) where a shampoo is formed using 2% triethanolamine N-(N'-cocoyl-alpha-aspartyl) aspartate, 20% triethanolamine N-cocoyl aspartate and 4% coconut oil fatty acid diethanolamide.

Oshimura, while teaching the incorporation of a long-chain-acyl dipeptide or a salt thereof, does not appear to explicitly teach (i.e. in a single example) the combination of N-acyl-diaspartic acids in a single preparation. Oshimura also does not appear to explicitly teach the instantly claimed weight ranges or speak to the pH of the formulation.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of the Oshimura reference and include a combination of N-acyl-diaspartic acids (or salts). One would have been motivated to do so since the Oshimura reference suggests that the N-long-chain-acyl dipeptides can be used in combination with one another (see page 3, line 39). Oshimura further exemplifies this suggestion by using dipeptide compositions of glutamate (see page 13, Table 13).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Oshimura and arrive at the instantly claimed weight ranges. One would have been motivated to do so during the routine

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optimization process since Oshimura teaches that the ratio of the dipeptide component and the N-long-chain-acyl acidic amino acid may be varied between 0.1:100 and 20:100 while still achieving satisfactory results. Oshimura further teaches that the amount of component (C), the fatty acid or a fatty acid salt, can be up to 30%. This teaching is further exemplified through the formulations taught by pages 12-14 of the reference.

Regarding claims 4-5, Oshimura teaches that the ratio of the dipeptide component and the N-long-chain-acyl acidic amino acid may be varied between 0.1:100 and 20:100 while still achieving satisfactory results. Oshimura further teaches that the amount of component (C), the fatty acid or a fatty acid salt, can be up to 30%. This teaching is further exemplified through the formulations taught by pages 12-14 of the reference.

Regarding claim 6, page 2 of the reference teaches that N-long-chain-acyl acidic amino acid salts exhibit excellent solution stability in the weakly acidic pH range. One having ordinary skill in the art would interpret a pH of 5.0-7.0 as "weakly acidic." Although Oshimura does not appear to explicitly teach a formulation in the instantly claimed pH range, it would have been prima facie obvious to one having ordinary skill in the art to adjust the pH to the weakly acidic range. One would have been motivated to do so because Oshimura teaches that such a range is mild to skin, exhibits less stretching feeling of the skin after use and also less irritation (page 2, lines 23-28).

Regarding claim 7, Oshimura teaches that the N-long-chain-acyl acidic amino acid is derived from aspartic acid and has an acyl group having 8 to 22 carbon atoms.

Note that where the prior art ranges overlap or encompass the claimed ranges, a prima facie case of obviousness exists (MPEP 2144.05).

Regarding claims 8-10, Oshimura teaches that salts of alkali metals such as sodium, potassium, triethanolamine, ammonium, etc. can be used for both components (A) and (B). See page 3, lines 35-40 and page 4, lines 3-7. Additionally see Tables 13-15.

Response to Arguments

Applicant argues in the remarks filed 03/01/2010 that Oshimura teaches that the aspartate dipeptides are utilized as alternatives, as evidenced by page 3, lines 27 and 28. Applicant's argument is not found persuasive since first, it is noted that on the same page of the Oshimura, Oshimura clearly teaches that combinations can be utilized (see entire document, for instance, page 3, line 39). Second, it is noted that the components are taught for the exact same purpose in the art, and therefore, even if *arguendo* they were not taught as such, MPEP 2144.05 states: “It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art.” *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (citations omitted). See also *In re Crockett*, 279 F.2d 274, 126 USPQ 186 (CCPA 1960); and *Ex parte Quadranti*, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992). Applicant further argues that Oshimura does not teach or suggest the instantly claimed ratio of 1:3 to 3:1 for formulae (2) and (3). Applicant's argument is not found persuasive since it

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would have been obvious to utilize equal amounts of said aspartate dipeptides, as is evidenced by Oshimura, see for instance the utilization of a 1:1 ratio of the glutamate dipeptides in Table 13. Applicant also argues that claim 1 requires the R groups to be the same in formulae (A), (B), and (C), while this is correct, Applicant's interpretation that the "components have identical R groups, as required by amended claim 1" is incorrect. Specifically, the claims recite with regard to R in formula (1) that "R is an alkyl group having from 7-23 carbon atoms", and in formula (2) that "R is the same alkyl group specified in formula (1)", and in formulae (3) and (4) "R is the same as in formula (2)". It is clear that R in all of said formulae is "an alkyl group having from 7-23 carbon atoms", and are not required to be "identical". Furthermore, the evidence to which Applicant points is not commensurate in scope with claim 1 in view of the examples only pointing to compositions wherein all of the R groups are identical lauroyl groups. Therefore, Applicant's arguments are not found persuasive.

Conclusion

No claims allowed. All claims rejected. No claims objected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TREVOR M. LOVE whose telephone number is (571)270-5259. The examiner can normally be reached on Monday-Thursday 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on 571-272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/David J Blanchard/
Primary Examiner, Art Unit 1643